Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) An electrochemical process for energy storage and/or power delivery comprising:

(i) maintaining and circulating electrolyte flows in a fully liquid system in which the active constituents are fully soluble in a single cell or in an array of repeating cell structures, each cell with a positive ($+^{ve}$) chamber containing an inert $+^{ve}$ electrode and a negative ($-^{ve}$) chamber containing an inert $-^{ve}$ electrode, the chambers being separated from one another by a cation exchange membrane, the electrolyte circulating in the $-^{ve}$ chamber of each cell during power is delivery containing a sulfide (electrolyte 1), and the electrolyte circulating in the $+^{ve}$ chamber during power delivery containing bromine (electrolyte 2),

(ii) restoring or replenishing the electrolytes in the $+^{ve}$ and $-^{ve}$ chambers by circulating the electrolyte from each chamber to storage means comprising a volume of electrolyte greater than the cell volume for extended delivery of power over a longer discharge cycle than the cell volume alone would permit, and

(iii) rebalancing the electrolytes by circulating a fraction of electrolyte 1 or electrolyte 2 through the $+^{ve}$ chamber of an auxiliary cell, said auxiliary cell comprising a $+^{ve}$ chamber containing an inert $+^{ve}$ electrode and a -ve chamber containing an inert $-^{ve}$ electrode, the chambers

being separated from one another by a cation exchange membrane, the electrolyte circulating through the $-^{ve}$ chamber of the auxiliary cell containing water and being free from polysulfide and free from bromine during rebalancing, the auxiliary cell operating so as to oxidise sulfide ions to sulfur or bromide ions to bromine in the $+^{ve}$ chamber and so as to reduce water to hydrogen and hydroxide ions in the $-^{ve}$ chamber.

2. (previously presented) A process as claimed in claim 1 wherein the electrolyte circulating through the $-^{ve}$ chamber of the auxiliary cell during rebalancing is a fraction of electrolyte 1 or electrolyte 2 which has been made free of polysulfide or bromine by electrochemical reduction thereof.

3. (previously presented) A process as claimed in claim 2 wherein the electrochemical reduction of polysulfide or bromine is effected by recirculating the fraction of electrolyte 1 or 2 through the $-^{ve}$ chamber of the auxiliary cell until all of the polysulfide or bromine has been reduced.

4. (previously presented) A process as claimed in claim 2 wherein the electrochemical reduction of polysulfide or bromine occurs within the $-^{ve}$ chamber of a second auxiliary cell which comprises a $+^{ve}$ chamber containing an inert $+^{ve}$ electrode and a $-^{ve}$ chamber containing an inert $-^{ve}$ electrode, the chambers being separated from one another by a cation exchange membrane, the electrolyte circulating through the $+^{ve}$ chamber being a fraction of electrolyte 1 or electrolyte 2.

5. (previously presented) A process as claimed in claim 4 wherein the electrochemical reduction of polysulfide or bromine is effected by recirculating the fraction of electrolyte 1 or 2 through the -^{ve} chamber of the second auxiliary cell until all of the polysulfide or bromine has been reduced.

6. (previously presented) A process as claimed in claim 3 wherein the electrolyte circulating through the -^{ve} chamber of the auxiliary cell during rebalancing is a fraction of electrolyte 2 and wherein the fraction is subsequently treated to remove sulfate ions contained therein.

7. (previously presented) A process as claimed in claim 6 wherein said sulfate ions are removed by crystallisation of a sulfate salt from the fraction of electrolyte 2.

8. (previously presented) A process as claimed in claim 2 wherein the fraction of electrolyte 1 or 2 which is circulated through the -^{ve} chamber of the auxiliary cell is returned to the main stream of electrolyte 1 or 2 respectively.

9. (previously presented) A process as claimed in claim 1 which additionally comprises adding elemental sulfur and/or a sulfide salt to electrolyte 1 in an amount sufficient to restore the initial concentration of sulfur species.

10. (currently amended) ~~Use, in a~~ A process for rebalancing electrolytes in a process for energy storage and/or power delivery comprising:

(i) maintaining and circulating electrolyte flows in a fully liquid system in which the active constituents are fully soluble in a single cell or in an

array of repeating cell structures, each cell with a positive ($+^{ve}$) chamber containing an inert $+^{ve}$ electrode and a negative ($-^{ve}$)chamber containing an inert $-^{ve}$ electrode, the chambers being separated from one another by a cation exchange membrane, the electrolyte circulating in the $-^{ve}$ chamber of each cell during power delivery containing a sulfide (electrolyte 1), and the electrolyte circulating in the $+^{ve}$ chamber during power delivery containing bromine (electrolyte 2), (ii) restoring or replenishing the electrolytes in the $+^{ve}$ and $-^{ve}$ chambers by circulating the electrolyte from each chamber to storage means comprising a volume of electrolyte greater than the cell volume for extended delivery of power over a longer discharge cycle than the cell volume alone would permit, and

~~of a process comprising:~~

(iii) circulating a fraction of electrolyte 1 or electrolyte 2 through the $+^{ve}$ chamber of an auxiliary cell, said auxiliary cell comprising a $+^{ve}$ chamber containing an inert $+^{ve}$ electrode and a $-^{ve}$ chamber containing an inert $-^{ve}$ electrode, the chambers being separated from one another by a cation exchange membrane, the electrolyte circulating through the $-^{ve}$ chamber of the auxiliary cell containing water and being free from polysulfide and free from bromine during rebalancing, the auxiliary cell operating so as to oxidise sulfide ions to polysulfide or bromide ions to bromine in the $+^{ve}$ chamber and so as to reduce water to hydrogen and hydroxide ions in the $-^{ve}$ chamber, for the purpose of rebalancing electrolytes 1 and 2.

11. (previously presented) An electrochemical apparatus for energy storage and/or power delivery comprising:

(i) a single cell or an array of repeating cell structures, each cell comprising; a $+^{ve}$ chamber containing an inert $+^{ve}$ electrode and a $-^{ve}$ chamber containing an inert $-^{ve}$ electrode the chambers being separated from one another by an ion exchange membrane, an electrolyte circulating in the $-^{ve}$ chamber of each cell which contains a sulfide during power delivery (electrolyte 1), and an electrolyte circulating in the $+^{ve}$ chamber which contains bromine during power delivery (electrolyte 2),

(ii) storage and circulation means for each electrolyte for restoring or replenishing the electrolytes in the $+^{ve}$ and $-^{ve}$ chambers,

(iii) means for rebalancing the electrolytes comprising an auxiliary cell which comprises a $+^{ve}$ chamber containing an inert $+^{ve}$ electrode and a $-^{ve}$ chamber containing an inert $-^{ve}$ electrode the chambers being separated from one another by cation exchange membrane, means for circulating fraction of electrolyte 1 or 2 through the $+^{ve}$ chamber of the auxiliary cell, an electrolyte containing water and being free from polysulfide and free from bromine during rebalancing and means for circulating said electrolyte through the $-^{ve}$ chamber of the auxiliary cell.

12. (previously presented) Apparatus as claimed in claim 11 wherein the means for circulating an electrolyte through the $-^{ve}$ chamber of the auxiliary cell comprises means for circulating a fraction of electrolyte 1 or 2 through the $-^{ve}$ chamber of the auxiliary cell.

13. (previously presented) Apparatus as claimed in claim 11 wherein the means for circulating an electrolyte through the $-^{ve}$ chamber of the auxiliary cell comprises a storage tank into which a fraction of electrolyte 1 or 2 may be transferred and means for re-circulating the fraction of electrolyte 1 or 2 between the $-^{ve}$ chamber of the auxiliary cell and said storage tank.

14. (previously presented) Apparatus as claimed in claim 12 which additionally comprises a second auxiliary cell which comprises a $+^{ve}$ chamber containing an inert $+^{ve}$ electrode and a $-^{ve}$ chamber containing an inert $-^{ve}$ electrode, the chambers being separated from one another by a cation exchange membrane, means for circulating a fraction of electrolyte 1 or 2 through the $+^{ve}$ chamber and means for circulating a fraction of electrolyte 1 or 2 through the $-^{ve}$ chamber.

15. (previously presented) Apparatus as claimed in claim 14 wherein the means for circulating an electrolyte through the $-^{ve}$ chamber of the second auxiliary cell comprises a storage tank into which a fraction of electrolyte 1 or 2 may be transferred and means for re-circulating the fraction of electrolyte 1 or 2 between the $-^{ve}$ chamber of the second auxiliary cell and said storage tank.

16. (previously presented) Apparatus as claimed in claim 12 wherein the electrolyte circulated through the $-^{ve}$ chamber of the auxiliary cell is electrolyte 2, additionally comprising means for removing sulfate ions from the fraction of electrolyte 2 after circulation through the $-^{ve}$ chamber of the auxiliary cell.

17. (previously presented) Apparatus as claimed in claim 16 wherein the means for removing sulfate ions from electrolyte 2 comprises a crystalliser.

18. (previously presented) Apparatus as claimed in claim 11 additionally comprising means for passing the fraction of electrolyte 1 or 2 which is circulated through the $-^{ve}$ chamber of the auxiliary cell back to the main stream of electrolyte 1 or 2 respectively.

19. (currently amended) ~~Use~~ An apparatus for rebalancing electrolytes in an electrochemical apparatus for energy storage and/or power delivery comprising:

(i) a single cell or an array of repeating cell structures, each cell comprising; a $+^{ve}$ chamber containing an inert $+^{ve}$ electrode and a $-^{ve}$ chamber containing an inert $-^{ve}$ electrode the chambers being separated from one another by an ion exchange membrane, an electrolyte circulating in the $-^{ve}$ chamber of each cell which contains a sulfide during power delivery (electrolyte 1), and an electrolyte circulating in the $+^{ve}$ chamber which contains bromine during power delivery (electrolyte 2), and

(ii) storage and circulation means for each electrolyte for restoring or replenishing the electrolytes in the $+^{ve}$ and $-^{ve}$ chambers, and

~~of~~

(iii) an auxiliary cell which comprises; a $+^{ve}$ chamber containing an inert $+^{ve}$ electrode and a $-^{ve}$ chamber containing an inert $-^{ve}$ electrode the chambers being separated from one another by a cation exchange membrane, means for passing a fraction of electrolyte 1 or 2 through

the $+^{ve}$ chamber of the auxiliary cell, an electrolyte containing water and being free from polysulfide and free from bromine during rebalancing and means for circulating said electrolyte through the $-^{ve}$ chamber of the auxiliary cell for the purpose of rebalancing electrolytes 1 and 2.